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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,307	10/22/2001	Romuald Pawluczyk	07121.0002U1	9312

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EXAMINER

GEISEL, KARA E

ART UNIT PAPER NUMBER

2877

DATE MAILED: 07/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/021,307

Applicant(s)

PAWLUCZYK, ROMUALD

Examiner

Kara E Geisel

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3 and 9-11 is/are allowed.
- 6) ☒ Claim(s) 4-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al. (USPN 6,373,568), previously cited.

In regards to claim 4, Miller discloses a light source (fig. 1, 1) for a photodetector array based spectrometer (columns 8-9, lines 55-67 and 1-10 respectively) comprising a primary light source (fig. 1, 10a-10j) producing a primary spectral output which results in a characteristic system response curve, and one, or more than one secondary light source (fig. 1, 10a-10j) producing a secondary spectral output complementary to said primary spectral output (column 14, lines 23-52) which combines with said primary spectral output (column 3, lines 35-45). Applicant has not provided structure necessary to accomplish “whereby, said combined spectral output results in a more uniform system response curve that is flatter than the system response curve obtained when a primary light source alone is used”. Therefore,

Art Unit: 2877

the lack of structural limitations fails to distinguish applicant's invention over prior art. Miller does not disclose that the primary light source has a spectral range from about 580nm to about 1080nm. However, Miller does disclose that some of the light sources can be broad band light sources (column 7, lines 62-67), and it is disclosed that the wavelengths can range from visible to near infrared (column 14, lines 23-52). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a broad band light source having a spectral range from about 580nm to about 1080nm as the primary light source, and use additional light sources to as the secondary light sources with a secondary spectral output complimentary to the primary spectral output to incorporate other bands that are needed.

In regards to claim 5, a light source for a photodetector array based spectrometer is disclosed above. Furthermore, the secondary light source can be a broadband light source (column 7, lines 62-66), having a shaping filter (fig. 1, 12a-12j and column 4, lines 43-47).

In regards to claim 6, a light source for a photodetector array based spectrometer is disclosed above. Furthermore, the secondary light source may be a narrow band light source (column 7, lines 62-67 and column 8, lines 23-26).

In regards to claim 7, a light source for a photodetector array based spectrometer is disclosed above. Furthermore, the narrow band light source may be a laser (column 7, lines 62-67 and column 8, lines 23-26).

In regards to claim 8, a light source for a photodetector array based spectrometer is disclosed above. Furthermore, multiple light sources may be combined by means of multiple branches of fiber optic bundles (column 8, lines 1-26).

***Allowable Subject Matter***

Claims 1-3 and 9-11 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Art Unit: 2877

As to claim 1, the prior art of record, taken alone or in combination, fails to disclose or render obvious a method for improving system response of a photodetector array based spectrometer, having a main light source comprising the step of adding at least one secondary light source with a secondary spectral output complimentary to at least one spectral band identified in a previous step so as to produce a combined spectral output which provides a modified system response curve which is at or above a predetermined value at the spectral band, in combination with the rest of the limitations of claim 1.

As to claim 9, the prior art of record, taken alone or in combination, fails to disclose or render obvious a method for improving system response of a photodetector array based spectrometer having a primary light source with a primary spectral output comprising the step of determining a modified system response for the spectrometer using the primary light source and one or more than one secondary light source with a secondary spectral output complimentary to the primary output, wherein said modified system response curve is at or above a predetermined value at on or more than one spectral bands, in combination with the rest of the limitations of claim 9.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 4-8 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Additional Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art made of record is Hafeman et al. (USPN 5,959,738).

Hafeman discloses a light source for a photodetector array based spectrometer comprising a primary light source having a spectral range in the visible to near infrared range, and one or more than one secondary light source producing a secondary spectral output complementary to said primary spectral output which combines with the primary spectral output (column 7-8, lines 47-67 and 1-16, respectively).

#### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kara E Geisel whose telephone number is 703 305 7182. The examiner can normally be reached on Monday through Friday, 8am to 4pm.

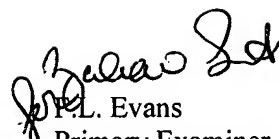
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on 703 308 4881. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872 9318 for regular communications and 703 872 9319 for After Final communications. For inquiries of a general nature, the Customer Service fax number is 703 872 9317.


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 1782.

Application/Control Number: 10/021,307

Page 6

Art Unit: 2877

  
P.L. Evans  
Primary Examiner  
Art Unit 2877

  
KEG  
July 16, 2003